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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/644,823

08/21/2003

Boris Ginzburg

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EXAMINER

RUSSELL, WANDA Z

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

06/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

5X

Office Action Summary	Application No. 10/644,823	Applicant(s) GINZBURG ET AL.	
	Examiner Wanda Z. Russell	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 May 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>08/21/2003, and 11/08/2004.</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Oath/Declaration

1. It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

INCORRECT STATEMENTS: "I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations Section 1.56(a)".

CORRECT STATEMENT should read "I acknowledge the duty to disclose information which is material to patentability of this application in accordance with Title 37, Code of Federal Regulations Section 1.56."

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. **Claims 29-34** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claimed article is non-statutory subject matter since it is not a process, machine, manufacture nor composition of matter; nor it is recorded on some computer-readable medium, see MPEP 2106(IV)(B)(1).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1-4, 10-14, and 17-21** are rejected under 35 U.S.C. 102(e) as being anticipated by Guo et al. (U.S. Patent 6,937,591 B2).

For **claim 1**, Guo et al. teach a method (col. 7, line 26) comprising:

enabling (provide, col. 7, line 26) a packet protection mechanism (cw, col. 7, line 21) based on a value of an adaptable request (require, col. 7, line 7) to send a threshold (col. 7, line 60-61, and network monitor, 204-Fig. 2), wherein the value (col. 7, line 39) of the adaptable request is determined according to a collision rate (collision probability, col. 7, line 38) of packets (col. 7, line 16) transmitted over a wireless local area network (WLAN, col. 7, line 37).

For **claim 2**, Guo et al. teach the method of claim 1 comprising: adapting the adaptable threshold based on a collision rate parameter received from a control signal (object, col. 5, line 62 and lines 62-63, and 203-Fig. 2).

For **claim 3**, Guo et al. teach the method of claim 2, wherein adapting comprises:

calculating (provide, col. 8, line 60) an average collision rate (average probability, col. 8, line 61) from the received collision rate parameter (col. 8, lines 59-63);

determining (col. 8, line 65) a transmission data rate (network characteristics, col. 8, line 65) and a control message (mapping function, col. 11, line 8) packet length; and

adapting (apply, col. 9, line 12) the adaptable threshold based on the average collision rate, the transmission data rate and the control message packet length (col. 9, lines 11-13).

For **claim 4**, Guo et al. teach the method of claim 1, wherein enabling the packet protection mechanism comprises: enabling a request to send\clear to send (RTS\CTS) control mechanism if the length of the packet is below the adaptable threshold (col. 8, lines 6-10).

For **claims 10-14, and 17-21**, they are apparatus claims corresponding to method claims 1-4. Therefore they are rejected for the same reason above.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 5, 15, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Guo et al. (U.S. Patent 6,937,591 B2), further in view of Cromer et al. (Pub No. US 2003/0210672 A1).

For **claim 5**, Guo et al. teach everything claimed as applied above (see claim 1).

However, Guo et al. fail to specifically teach the method of claim 1, wherein enabling the packet protection mechanism comprises: enabling a request to send\clear to send (RTS\CTS) control mechanism if the collision rate parameter is to indicate a possible hidden station.

Cromer et al. teach the method wherein enabling the packet protection mechanism comprises:

enabling a request to send\clear to send (RTS\CTS) control mechanism if the collision rate parameter is to indicate a possible hidden station ([0031], lines 4-5, and lines 1-5).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine [Guo et al.] with [Cromer et al.] to obtain the invention as specified for providing better collision avoidance scheme.

For **claims 15, and 22**, they are apparatus claims corresponding to method claims 5. Therefore they are rejected for the same reason above.

8. **Claims 6-9, 16, and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Guo et al. (U.S. Patent 6,937,591 B2), further in view of Cromer et al. (Pub No. US 2003/0210672 A1), and Myles et al. (U.S. Patent 7,184,407 B1).

For **claim 6**, Guo et al. and Cromer et al. teach everything claimed as applied above (see claim 1 and 5).

However, they fail to specifically teach the method of claim 5, further comprising: detecting a hidden station based on reception at a visible station of one control messages without another control message of the request to send\clear to send (RTS\CTS) control mechanism or reception of acknowledgment frames.

Myles et al. teach the method of claim 5, further comprising:

detecting (col. 5, line 38) a hidden station (hidden node, col. 5, line 37) based on reception at a visible station of one control messages (ACK, col. 5, line 39) without

another control message (a DATA frame, col. 5, line 40) of the request to send\clear to send (RTS\CTS) (col. 5, line 50) control mechanism or reception of acknowledgment frames (col. 5, line 50).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine [Guo et al.] with [Cromer et al.], and [Myles et al.] to obtain the invention as specified for automatic hidden station detection.

For **claim 7**, Guo et al., Cromer et al., and Myles et al. teach everything claimed as applied above (see claim 1, 5, and 6). In addition, Cromer et al. teach the method of claim 6, further comprising:

adding (report, col. 2, line 38, and lines 37-39) the detected hidden station to a list.

For **claim 8**, Guo et al., Cromer et al., and Myles et al. teach everything claimed as applied above (see claim 1, 5, 6, and 7). In addition, Cromer et al. teach the method of claim 7, comprising:

removing (invoke hidden node avoidance, Abstract, line 13) the hidden station from the list when both control messages of the request to send\clear to send (RTS\CTS) control mechanism from the hidden station are received at the visible station.

For **claim 9**, Guo et al., Cromer et al., and Myles et al. teach everything claimed as applied above (see claim 1, 5, 6, and 7). In addition, Cromer et al. teach the method of claim 7, comprising:

disabling (take action, col. 6, line 63, and lines 60-63) the request to send\clear to send (RTS\CTS) control mechanism by adapting the value of an adaptable request to send a threshold if the list is empty.

For **claims 16, and 23**, they are apparatus claims corresponding to method claims 6. Therefore they are rejected for the same reason above.

9. For **claims 24-28**, they are apparatus claims corresponding to method claims 1-9. Therefore they are rejected for the same reason above.

10. For **claims 29-34**, they are article claims corresponding to method claims 1-9. Therefore they are rejected for the same reason above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda Z. Russell whose telephone number is (571) 270-1796. The examiner can normally be reached on Monday-Thursday 9:00-6:00 EST.

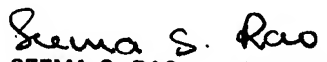
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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